

COLORADO DISCHARGE PERMIT SYSTEM (CDPS)

FACT SHEET FOR AMENDMENT NO. 1

CITY OF STERLING WWTF

CDPS PERMIT NUMBER CO-0026247, LOGAN COUNTY

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I. TYPE OF PERMIT

Major Amendment #1

II. FACILITY INFORMATION

- A. Facility Type: Domestic- Major Municipal, Mechanical Plant
- B. Facility Classification: Class B per Section 100.5.2 of the Regulations for Certification of Water Treatment Plant and Wastewater Treatment Plant Operators.
- C. Fee Category 1: Domestic Wastewater – Mechanical Plant, Category 21, Subcategory 7
Category Flow Range: Sewage from 2,500,000 up to 9,999,999 gpd
Annual Fee: \$11,410 effective July 1, 2007
Amendment Fee: \$0.00
- D. Legal Contact: Joseph D. Kiolbasa, City Manager
City of Sterling
421 N. 4th Street
Sterling, CO 80751
970-522-9700
- E. Facility Contact: Tim Peake, Operator in Responsible Charge
City of Sterling WWTF
15956 County Road 370
Sterling, CO 80751
970-522-4804
- F. Facility Location: 15956 County Road 370, Sterling, CO, 80751
Latitude: 103° 8' 15.9" West, Longitude: 40° 39' 49" North
- D. Discharge Point:** 001A, at the pump station and force main following the chlorine contact chamber and dechlorination but prior to entering the South Platte River, 40 39' 15" North Latitude, 103 07' 30" West Longitude
- 002A, at the pump station and force main following the chlorine contact chamber and dechlorination but prior to entering the recharge basins, 40 39' 15" North Latitude, 103 07' 30" West Longitude
- 050A, 050C, 050D, 050F- the four downgradient monitoring wells around the recharge basins located on the south side of the South Platte River.
- The location(s) provided above will serve as the point(s) of compliance for this permit and are appropriate as they are located after all treatment and prior to discharge to the receiving water.

III. PURPOSE OF AMENDMENT

In modification form received by the Division on November 26, 2012, the City of Sterling (the City) requested numerous modifications to their permit. The requests are summarized as follows:

1. The City requests compliance schedules to meet *E. coli* and TRC limitations.
2. The City requests a compliance schedule to meet T.I.N. limitations.
3. The City requests that the total coliform limitations be eliminated from down-gradient monitoring wells.
4. The City requests that the classification of the facility return to a mechanical plant instead of the new lagoon classification.
5. The City requests that the monitoring frequency requirements established in the permit be modified to reflect expected flows rather than design capacity.
6. The City requests that ammonia and TRC limitations be removed from discharges to the recharge basins.
7. The City requests that the maximum effluent TDS concentration limit for the down-gradient wells be recalculated to take into account ambient groundwater concentrations.

IV. CHANGES MADE AS A RESULT OF THE AMENDMENT

Request 1: The City requests compliance schedules to meet *E. coli* and TRC limitations.

According to the Fact Sheet, previous monitoring for fecal coliform indicated that the limitation for *E. coli* can be met. Additionally, the Division has reviewed recent DMR reports and the set limitations have been fully met. Therefore, no compliance schedule will be allowed for *E. coli*. For TRC, previous monitoring indicates that the new limitation (with the change in limitation for TRC to 0.5 mg/l as per Request 6) will be met. A compliance schedule will not be allowed for TRC.

Request 2: The City requests a compliance schedule to meet T.I.N. limitations.

The original Fact Sheet and Permit were supposed to include a compliance schedule, therefore a compliance schedule will be added to the permit. **With this change, a T.I.N. compliance schedule was added to outfall 002A in Part 1.A.2 and Part 1.B.6 of the permit.** See Response 3 for more information on Outfall 002A.

Request 3: The City requests that the total coliform limitations be eliminated from down-gradient monitoring wells.

E. coli limitations are part of the surface water standards; total coliform limitations are a part of the ground water standards. Total coliform limitations must remain on the down-gradient monitoring wells because the *E. coli* limitations are not protective of the total coliform standards. However, the Division will remove the *E. coli* standards from the monitoring requirements prior to the recharge basins, as the total coliform limitations are protective of the *E. coli* standards. **With this change, a second outfall 002A has been added to the permit that only applies to the recharge basins, separating the requirements for discharge out of Outfall 001A (South Platte River) and Outfall 002A to recharge basins for protection of South Platte River recharge. Part 1.A.1 of the permit will reflect this change.**

Request 4: The City requests that the classification of the facility return to a mechanical plant instead of the new lagoon classification.

As the primary treatment of the facility is mechanical, the Division agrees to this request. Therefore, the limitations and reporting frequency for TSS will change. Also, the fee for this permit has also increased to reflect this change. **With this change, TSS limitations and monitoring frequency will change in Part 1.A.2 and Part 1.A.3.**

Request 5: The City requests that the monitoring frequency requirements established in the permit be modified to reflect expected flows rather than design capacity.

The Division has reviewed the data and concurs with this request. Monitoring frequencies will be based off the average expected flow instead of design capacity (approximately 1.5 MGD vs. 2.68 MGD). **With this change, monitoring frequencies will change in Part 1.A.2 and Part 1.A.3 of the permit.**

Request 6: The City requests that ammonia and TRC limitations be removed from discharges to the recharge basins.

Considering the length of time (between one month and five years) it takes for water discharged to the recharge basins to reach the South Platte River, the Division will grant the request that ammonia limitations are removed from Outfall 002A (please see Response 3 for more information on Outfall 002A). Instead a report only requirement will be added to the permit. TRC is to be applied, at the very least, as a technology based effluent limitation (TBEL). Therefore the TBEL will be applied to Outfall 002A instead of the WQBEL. **With this change, TRC limitations will change to Report for the 30-day average and 0.5 mg/L for the daily maximum in Part I.A.2 of the permit. Ammonia limitations will be replaced with Report Only for Outfall 002A in Part I.A.2 of the permit.**

Request 7: The City requests that the maximum effluent TDS concentration limit for the down-gradient wells be recalculated to take into account ambient groundwater concentrations.

According to Regulation 41.12 and Table 4 in Regulation 41, the limit for ambient quality between 0 and 500 mg/l is either 400 mg/l or 1.25x the ambient, whichever is greater. After eliminating one significant outlier (greater than 1700 mg/l) from the available data (see table below), all data points from the up-gradient well 050B are 280 mg/l or below. If the highest value is used, the result is $280 \times 1.25 = 350$ mg/l. The 400 mg/l is greater and therefore the limit must remain at 400 mg/l.

Date	TDS in mg/l
3/2006	180
6/2006	145
8/2006	Lori Mulsoff
10/2006	193
3/2007	150
4/2007	200
7/2007	220
10/2007	1760
3/2008	166
4/2008	180
7/2008	182
11/2008	173
3/2009	174
4/2009	180
8/2009	180
11/2009	170
3/2010	190
4/2010	165
9/2010	280
10/2010	236

Lori Mulsoff
February 4, 2013

V. PUBLIC NOTICE COMMENTS